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EXAMINER

LAI, ANDREW

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/776,894	<b>Applicant(s)</b> MINHAZUDDIN, MUNEYB	
	<b>Examiner</b> ANDREW LAI	<b>Art Unit</b> 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23-42 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,6,15-17,20,27 and 28 is/are allowed.
- 6) ☒ Claim(s) 1-4,7-14,16-21,23-26,28-36,40 and 41 is/are rejected.
- 7) ☒ Claim(s) 37-39 and 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/24/2009</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 37-39 and 42 are objected to because of the following informalities:

Claim 37 was previously depending from claim 23 and deemed containing allowable subject matter. Applicant amended said claim which, per Applicant's Remarks page 11 second paragraph, should have been rewritten in Independent form with all limitations of Independent claim 23. However, claim 37 still recites "*The controller of claim 23,*" which appears to be a typographic error appropriate correction is required before the claim can be allowed.

Claims 38, 39 and 42 are objected to for their depending from claim 37.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7-9, 12, 18-21, 23-26, 29-31, 34, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al (US 7,023,839, Shaffer hereinafter) in view of Qin et al (US 6,393,480, Qin hereinafter) and further in view of Johnsson (US 2002/0006131).

Shaffer discloses "system and method for dynamic codec alteration" (col. 1 lines 1-2) in "telephone-over LAN (ToL) systems" (col. 1 line 19 and fig. 1) performing "call

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setup and clearing on both the LAN side and switched circuit network (i.e., public switched telephone network or PSTN) side” (col. 4 lines 43-45) comprising the following features:

- **With respect to Independent claims 1/23**

**Regarding claims 1**, *a method for performing call admission control* (refer to fig. 1 and see “the H.323 gateway 106 generally provides ... and performs call setup and clearing”, col. 4 lines 41-44, see further, e.g. fig. 6 depicting “ARQ 602” for call Admission Request), *comprising: ...*

**Regarding claim 23**, *a call admission controller* (refer to fig. 1 “gatekeeper 108 and “BWAS [bandwidth allocation server] 109”), *comprising:*

*a processor* (fig. 3 “control processor 302”) *operable to ...*

**Regarding claims 1/23:** *(a) determining/determine at least one of (i) a bandwidth utilization level* (refer to fig. 1 and see “the BWAS [bandwidth allocation server] 109 monitors system bandwidth usage”) *for a first Local Area Network system* (above cited “ToL system”), *and (ii) an available bandwidth level* (“the BWAS 109 calculates the remaining network bandwidth”, col. 6 line 21) *for the first LAN system* (“ToL system”) *and one or more Quality of Service or QoS metrics* (“the BWAS 109 saves the requested QoS levels for existing calls as well as the actual QoS level being provided”, col. 9 lines 28-30) *for the first LAN system* (again “ToL system”);

*(b) comparing/compare the determined at least one bandwidth level to one or more selected thresholds* (generally see “BWAS 109 can measure and track the network traffic to make the determinations of the relevant thresholds being crossed”,

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col. 5 lines 23-25, and particularly see "compares the system bandwidth usage against the threshold value X", col. 5 line 67 - col. 6 line 1, and "[check] if the threshold X were to be exceeded such that 1 Mbps network bandwidth is remaining", col. 6 lines 34-35. It should be noted that Shaffer also discloses further that "if one or more new calls require a higher QoS, then the BWAS 109 determines whether lower QoS calls may be reset", col. 5 lines 30-33. This suggest that QoS may also be taken into account when performing call admission) *to determine whether a new live voice communication* ("performs call setup and clearing on both the LAN side and switched circuit network (e.g., public switched telephone network or PSTN) side", col. 4 lines 43-45, noting "PSTN" deals with *live voice communications*) *may be set up with a first selected codec* ("the BWAS 109 monitors system bandwidth usage and directs each H.323 terminal to adopt a particular codec or coding algorithm according to bandwidth availability", col. 3 lines 5-8);

*(c) determining that the new live voice communication may not be set up with the first selected codec* (fig. 8 step 806 "BW [bandwidth] Avail ?" and associated "No" branch) *and in response to determining that the new live voice communication may not be set up with the first selected codec* (again the "No" branch cited herein), *performing at least one of the following steps:*

*(i) selecting/select a second different codec from among a plurality of possible codecs for the new live voice communication, wherein the second codec has a lower bit rate than the first codec;*

(ii) *changing/change an existing live voice communication on the first LAN system from the first codec to the second codec; and*

(iii) *redirecting/redirect the new live communication from the first LAN path to a second different LAN path, wherein the second LAN path does not include the first LAN link.*

(fig. 8, continuing along above cited "No" branch, at step 812 where it is checked "if there exist connections whose QoS is presently more than needed or requested", col. 9 lines 44-46, and if "No", step 816 "make call with lower codec speed"; or if "Yes", step 814 "re-negotiate codec speed" for *existing communications* as further explained "If, however, the existing connections may be downgraded, the renegotiate lower codec speed process is undertaken in a step 814, ... and the call is made (step 808)", col. 9 lines 51-54).

It is noted that, when disclosing step (a) for a LAN system, Shaffer does not expressly disclose, regarding claims 1/23, that determining/determine one of the bandwidth utilization level, available bandwidth level, and QoS metrics with respect to a *WAN path including a WAN link*.

However, determining said communication parameters with a *WAN path/link* has long been well known in the art at the time of the instant invention. Below is merely one example of many.

Qin discloses an invention, in view of "a network-based multi-tiered or distributed application that works well across a Local Area Network (LAN) may fail to perform well

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across a Wide Area Network (WAN)" (col. 1 lines 18-20), "for application response time prediction" (Abstract line 2). Qin's invention comprises:

**Regarding claims 1/23**, determining/determine one of the bandwidth utilization level, available bandwidth level, and QoS metrics with respect to a *WAN path including a WAN link* ("the present invention is able to measure bandwidth for the WAN implementation of the application by determining an equivalent bandwidth based on the bandwidth of the WAN link and ... the utilization factor of the network", col. 2, lines 37-42, which includes for example "bottleneck bandwidth of the WAN (maximum available WAN link bandwidth)", col. 2 lines 19-20).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shaffer's method/system by adding Qin's WAN path/link specific bandwidth determining mechanism in order to provide an enhanced and thus more effective/efficient system that is "able to predict the performance ... of a network-based application on a particular network, before the application is actually deployed on the network" (Qin, col. 1 lines 24-27) such that "network-based applications" [e.g., *call admission control* – Examiner notes] will "be able to run satisfactorily in the particular network environment" (Qin, col. 1 lines 31-32) and "can save substantial costs in developing an application" (Qin, col. 1 lines 28-29).

It is further noted that, while disclosing considering comparing bandwidth limitation in call admission to one or more thresholds and suggested considering also QoS, Shaffer in view of Qin does not expressly disclose, regarding claims 1 and 23,

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such comparison takes into account bandwidth information *and* (in combination with) *one or more Quality of Service or QoS metrics* for call admission.

Johnsson discloses "arrangement for establishing connections through a network" (Title) based on bandwidth, which "means the number of bits per second that can be transmitted by a user of the connection" ([0004] lines 5-7), and QoS "in terms of end-to-end delay and delay variation, packet loss ratio, etc." ([0004] last two lines).

Johnsson's disclosure comprises:

**Regarding claims 1/23**, *comparing available bandwidth level for the first path and one or more Quality of Service or QoS metrics* [to certain thresholds] ("resources have to be allocated in the network to assure that each individual end-to-end AAL2 connection, for each direction is assigned a certain amount of bandwidth and that a certain level of quality of service (QoS) can be guaranteed for that connection", [0004] lines 1-5, emphasis added).

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method/system of Shaffer by adding bandwidth availability in combination with QoS factors of Johnsson in call admission in order to provide a refined call control mechanism which guarantees "that appropriate resources are available to ensure that the network can guarantee the bandwidth and the QoS associated with the connection" (Johnsson, [0005] lines 2-5, emphasis added).

- **With respect to Dependent claims**

Shaffer discloses the following features:



**Regarding claims 2/24,** *(c) (i) is performed and further comprising: receiving a request to place the new live voice communication (fig. 6 step 602 "ARQ" or "Admission Request");*

*setting up the new live voice communication with the second codec (fig. 8 step 816 "make call with lower codec speed").*

**Regarding claims 3/25,** *wherein each of a plurality of codecs has a corresponding bit rate and/or required utilization threshold ("although the G.711 codec is the mandatory audio codec for an H.323 terminal, other audio codecs, such as G.728, G.729, G.723.1, G.722, MPEG1 audio, etc. may also be used", col. 3 lines 52-55, which codes are well known in the art to have different bit rate which in turn require corresponding bandwidth level) and the selecting step comprises: comparing at least one of the available bandwidth level and the bandwidth utilization level with the plurality of bit rates and/or utilization threshold ("if one or more new calls require a higher QoS (i.e., bandwidth), then the BWAS 109 determines whether lower QoS calls may be reset to still lower QoS codec", col. 5 lines 30-33); and*

*selecting the highest quality codec having a corresponding bit rate and/or utilization level permitted by the at least one of the available bandwidth level and the bandwidth utilization level ("the BWAS 109 may send an RAS command or H.245 signaling to the H.323 terminals to step down to the next fastest coding algorithm", col. 7 lines 45-47).*

**Regarding claims 4/26,** *wherein the comparing comprises:*

*comparing at least one of (i) a bandwidth utilization level and (ii) an available bandwidth level with one or more selected thresholds; and comparing one or more Quality of Service or QoS metrics with one or more selected thresholds (see discussion above regarding claims 1/23), wherein the second codec has a bandwidth usage characteristic sufficient to satisfy the comparing steps ("the BWAS 109 may send an RAS command or H.245 signaling to the H.323 terminals to step down to the next fastest coding algorithm", col. 7 lines 45-47, noting that to be able to identify "the next fastest" codec, the codecs have to have *bandwidth usage characteristic sufficient for the comparing steps*).*

**Regarding claims 7/29**, *wherein substep (c)(ii) is performed ("if the difference between the QoS levels meets a threshold, then the existing call(s) will have its (or their) codecs renegotiated to a lower level", col. 8 lines 65-57).*

**Regarding claims 8/30**, *wherein, when the existing live voice communication was set up, the first and second codecs were identified as being acceptable to both endpoints.*

**Regarding claims 9/31**, *wherein substep (c)(ii) comprises: renegotiating with destination the codec to be used in the live voice communication.*

("the BWAS ... monitors bandwidth usage, and if there is a disparity between the bandwidth allocated to new connections versus ongoing ones ... the BWAS sends a lower codec speed message to all active H.323 entities. This causes the H.323 entities to renegotiate their codecs. The original calling party then selects a lower Speed codec and sends a message to the called party to proceed with H.323 codec negotiation", col.

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2 lines 9-17. It should be noted that the fact both parties were in "ongoing" call indicates that a first codec was accepted by both, and the "renegotiation" indicates that a second (and lower speed) codec is also accepted by both).

**Regarding claims 12/34**, *wherein in the determining operation the bandwidth utilization level is determined* (refer to figs. 1 and 3 and see "the BWAS 109, in particular the bandwidth monitor 306, proceeds to monitor system bandwidth usage", col. 5 lines 62-64).

**Regarding claims 18/40**, *wherein one or more QoS metrics is determined* (fig. 8 step 800 "receive QoS levels").

**Regarding claim 21**, *a computer readable medium* (fig. 3 "memory 308") *having processor executable instructions stored thereon that, when executed, perform the steps of claim 1* ("The control processor 302 is couple to a memory 308 which is used to store bandwidth threshold information", col. 5 lines 8-10, noting that said "threshold information" is used to *perform the steps of claim 1* as already discussed above with respect to claim 1).

Shaffer does not expressly but Qin does disclose:

**Regarding claims 18/40**, QoS is determined *for the first path*, or in other words *path-specifically determined* ("measure bandwidth for the WAN implementation of the application by determining an equivalent bandwidth based on the bandwidth of the WAN link and ... the utilization factor of the network", col. 2, lines 37-42, which includes for example "bottleneck bandwidth of the WAN (maximum available WAN link bandwidth)", col. 2 lines 19-20).

Shaffer in view of Qin does not expressly but Johnsson does disclose:

**Regarding claims 19/41**, *wherein one or more QoS metrics is at least one of packet delay, jitter, packet loss, the availability of Differential Services Code Point and RSCP status* ("QoS can be expressed in terms of end-to-end delay and delay variations, packet loss ratio, etc.", [0004] last two lines).

4. Claims 10/32 and 11/33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Qin and Johnsson as applied to claims 1, 2, 23 and 24 above, and further in view of Ho (US 6,452,922).

Shaffer in view of Qin and Johnsson discloses claimed limitations in section 3 above, which does not expressly disclose the features of claims 10/32 and 11/33.

Ho discloses that "an apparatus causes alternate connection of a telephone call directed an IP network" (Abstract lines 1-2) employing separate "IP interface" card and "PSTN interface" card (fig. 1 items 104 and 102), said "IP network" (see fig. 1 item 108) being a WAN in that, when a call is to be routed, "if the QoS that the IP network 108 ... is less than the desired QoS threshold, the call is ... connected through another network 106 [PSTN - Examiner notes and see fig. 1, which is a wide area telephony network as well known in the art]. Otherwise, the call is connected through the IP network 108", col. 2 lines 55-60, which means that the "IP network 108" must be able to deliver calls, when "QoS" is good, exactly as wide as the PSTN can and thus must be a WAN). Ho's invention comprises:

**Regarding claims 10/32**, *wherein substep (c)(iii) is performed* [note: substep (c)(iii) recites *redirecting/redirect the new live voice communication from the first path to*

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*a second different path wherein the second path does not include the first link]* (refer to fig. 1 and see “a network interface card 104 ... will cause a call directed to the card to be redirected to a different network 106 if the QoS for the call will be below the desired threshold”, col. 2 lines 41-45).

**Regarding claims 11/33**, *wherein the first WAN link corresponding to a first set of port numbers and the second link to a second set of port numbers, wherein the first and second sets of port numbers are non-overlapping, wherein packets addressed to one of the first set of port numbers are directed along the first WAN link and packets addressed to one of the second set of port numbers are directed along the second WAN link* (refer to fig. 1 wherein “call processor 100” comprises two separate, thus *non-overlapping*, ports communicating via two separate, thus *non-overlapping*, links with two separate, thus *non-overlapping*, network “interface” cards, i.e. “IP” and “PSTN”. It is obvious as well as intuitive to one skilled in the art to appreciate for said separate or *non-overlapping* ports to have separate, thus *non-overlapping*, first and second sets of *non-overlapping* port numbers) and wherein the redirection step comprises:

*selecting/select for the packetized live voice communication a port address* (note that it is well known in the art that each port in a multi-ports communication unit, such as the “call processor 100” cited above, is identified by a *port address* or certain type of port ID) *from the first set of port numbers when a new live voice communication can be set up with the first selected codec and*

*selecting/select for the packetized live voice communication a port address from the second set of port numbers when a new live voice communication cannot be set up with the first selected codec.*

(still refer to fig. 1 and see "If the QoS that the IP network 1 108 has provided recently for test packets to be destination of the call to be routed is less than the desired QoS threshold, then the call is returned to the call processor 100 to be connected through another network 106 [noting that call to networks 108 and 106 uses above cited separate *ports, interfaces and links*]. Otherwise, the call is connected through the IP network 108).

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method/system of Shaffer by adding the call redirection mechanism of Ho to Shaffer in order to provide more robust system capable of "monitoring the quality of service (QoS) of the IP network and connecting a telephone call over an alternate network, on a call by call basis" (Ho, col. 1 lines 60-62) which would offer an important improvement to overcome the "disadvantage of VoIP Networks" having the "variability of the quality of the signal received at the destination as determined by changing network conditions" (Ho, col. 1 lines 42-44).

5. Claims 13/35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Qin and Johnsson as applied to claims 1/23 above, and further in view of Lachman, III et al (US 2002/0166063, Lachman hereinafter).

Shaffer in view of Qin and Johnsson discloses claimed limitations in section 5 above, which further comprises Qin disclosing

**Regarding claims 13/35**, *the bandwidth utilization level is determined* (“measure bandwidth for the WAN implementation ... based on the bandwidth of the WAN link” cited above for claims 1/23) and *wherein the first WAN link comprises a WAN link between a local edge router and the WAN* (naturally so in Qin because one issue concerning Qin is, as cited above, application that works well across LAN may fail to perform well across a WAN, and thus Qin must consider both LAN and WAN, thus the *links* therebetween must *comprise a WAN link between a local edge router* [any LAN will have to have this for connecting to a WAN as well known in the art] *and the WAN*).

Shaffer in view of Qin and Johnsson however does not expressly disclose, regarding claims 13/35, said “bandwidth of the WAN link” is measured/determined by *polling a local edge router*. However, polling a LAN *edge router* to get associated WAN link bandwidth data has been a well known technique at the time of instant invention. Below is just one example of many.

However, Lachman discloses “system and method for anti-network terrorism” (page 1 left column lines 1-2) using “a graph generated by Multi-Router Traffic Grapher (MRTG)” ([0140] lines 3-4) wherein, refer to fig. 1, a LAN (“host network 101”) is *linked* to a WAN (“Internet 112”) via a *local edge router* (“uplink router 110”) and through a *WAN link between the local edge router and the WAN* (fig. 1 the *link* between “uplink router 110” and “Internet 112”). Lachman’s invention comprises:

**Regarding claims 13/35**, bandwidth utilization level determined *by polling a local edge router* (refer to fig. 17, which “illustrates a man screen GUI for a central monitoring station”, [0038] lines 1-2, and see “through block 1704, the MRTG can poll the Router’s

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[e.g., fig. 1 “uplink router 110” – Examiner notes] SNMP data and can chart the relative inbound/outbound bandwidth utilization”, [0156] lines 4-6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify Shaffer by adding the particular bandwidth monitoring method of Lachman to Shaffer in order to provide a better protected system “that can monitor incoming data packets from a number of routers on a host network and that can detect a flood attack on any of the routers” (Lachman, [0014] lines 16-18).

6. Claims 14/36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Qin and Johnsson as applied to claims 12/34 above, and further in view of Garg et al (US 2004/0008627, Garg hereinafter).

Shaffer in view of Qin and Johnsson discloses claimed limitations in section 3 above. Shaffer further discloses:

**Regarding claims 14/36**, wherein the bandwidth utilization level is the end-to-end bandwidth (since Shaffer discloses end-to-end codec negotiations, i.e. between calling and called parties, based on bandwidth utilization level monitoring, said bandwidth utilization level will also have to be end-to-end).

Shaffer in view of Qin and Johnsson does not disclose, regarding claims 14/36, determining said end-to-end bandwidth using at least one of Reservation Protocol messages, Path Differentiated Services, and Multi-Protocol Label Switching.

Garg discloses “method and apparatus for performing admission control” (Title) utilizing “access points” (figs. 1 and 2) having “flow monitor” and “bandwidth and admission controller/enforcer” (fig. 3) wherein “a VoIP call can be established with a



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device only if the network has sufficient resources to accommodate the call or it is possible to make such resources available by curtailing ongoing data connections"

(Abstract lines 2-5). Garg's invention comprises:

**Regarding claims 14/36**, *determining end-to-end bandwidth using at least one of Reservation Protocol messages, Path Differentiated Services, and Multi-Protocol Label Switching* (refer to fig. 3 and see "the access point 200 includes a flow monitor 310 that monitors the traffic to and from the wireless network, classifies the traffic into flow and computes the bandwidth of each flow. A scan/signal engine 320 detects traffic intended to establish a VoIP flow using various means, for instance by leveraging Resource Reservation Protocol (RSVP)", [0058] lines 1-7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify Shaffer by adding the Resource Reservation Protocol of Garg for determining bandwidth in order to provide a better system that overcomes prior art problem "which leads to unacceptable packet loss for all VoIP streams transmitted from the access point to a client resulting in poor call quality for all connections." (Garg, [0006] lines 11-14).

### ***Allowable Subject Matter***

7. Claims 5-6, 15-17 and 20, and 27-28 are allowed.

In previous Office Action, Examiner indicated Claims 5, 15 and 27 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and Examiner also provided reasons why said claims,

as well as their respective Dependent claims, are deemed allowable. Applicant amended said claims as required and said claims are hereby allowed.

8. Claims 37-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As said in Section 1 above, claim 37 appears to have a typographic error that still makes claim 37 depend from claim 23 although the whole claim 37 otherwise appears to be Independent, comprising essentially all the limitations of claim 15 allowed above. Therefore, providing that Applicant corrects said typographic error, claim 37 and the associated Dependent claims would be allowed as well.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1 and 23 on the newly added limitation related to *Wide Area Network (WAN) path/link* have been considered but are moot in view of the new ground(s) of rejection.

All of the newly added *WAN path/link* related limitations are taught by newly applied art of Qin as discussed in the various sections above, which consequently renders Applicant's arguments in this regard moot.

10. Applicant's other arguments filed 3/20/2009 have been fully considered but they are not persuasive.

One of Applicant's other arguments draws to the combination of Johnsson with Shaffer and Graham (now Qin). Applicant argues (Remarks page 14 last paragraph) "...

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by teaching that both bandwidth requirements and QoS must be met before agreeing to reserve resources, Johnsson teaches away from the claimed invention's use of both collected QoS characteristics (or network state) and bandwidth measures *in selecting a proper codec. According to Johnsson, the failure of the bandwidth measures and QoS characteristics to satisfy selected threshold would bar selection of a codec and not lead to selection of a different codec. If Johnsson were modified* according to the Examiner's suggestion, Johnsson would not operate as intended." (emphasis, i.e., underlined parts, added).

Examiner respectfully disagrees.

It appears to the Examiner that Applicant has no dispute that Johnsson has taught the claimed feature of considering both bandwidth requirements and QoS for admission control, but disputes that Johnsson does not provide "selection of a codec" based on such consideration and thus "If Johnsson were modified" then he "would not operate as intended."

Examiner would like to draw Applicant's attention to, **1)** Shaffer has provided "selection of a codec" based on "bandwidth requirements", and Shaffer also provided QoS without expressly teaching factoring QoS consideration into "selection of a codec", which is a means for "call admission control" by Shaffer, but Johnsson provided consideration of both for his means for "call admission control" in terms of the "number of bits per second that can be transmitted by a user". Therefore, it would have been obvious to one skilled in the art to modify Shaffer by adding Johnsson's method in order to guarantee "that appropriate resources are available to ensure that the network can guarantee the bandwidth and the QoS associated with the connection" (Johnsson, [0005] lines 2-5, emphasis added); and **2)** it is Shaffer in view of Qin, **instead of**

**Johnsson**, that is being modified. Therefore the "If Johnsson were modified" condition does not exist at all and so not does Johnson "would not operate as intended".

The rest of Applicant's other arguments (Remarks page 15) relate to the assertion that "The dependent claims provide added reasons for allowance" for which Applicant listed claims 3/25 and 11/33 by merely reciting the features in said claims without elaborating why applied arts fail to teach said features. This type of arguments cannot be considered persuasive for their lack of supporting rationale and/or evidence.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW LAI whose telephone number is (571)272-

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9741. The examiner can normally be reached on M-F 7:30-5:00 EST, Off alternative Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on 571-272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Lai/  
Examiner, Art Unit 2416

/KWANG B. YAO/

Supervisory Patent Examiner, Art Unit 2416